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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/060,157 | 01/30/2002 | Donald E. Richeson | MGP.P.US0084 | 7545 |

7590 09/30/2004

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| EXAMINER |
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KUHNS, ALLAN R

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| ART UNIT | PAPER NUMBER |
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1732

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------|--------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/060,157 | RICHESON | |
| | Examiner | Art Unit | |
| | Allan Kuhns | 1732 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on JULY 2, 2004
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. Claims 20-27 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a specific cellular thermoplastic article which has been subjected to moisture preconditioning within a specific relative humidity range until the article achieves moisture equilibrium and then undergoes a specific impact test, as described in the specification beginning at page 6, line 29, does not reasonably provide enablement for other cellular thermoplastic articles whose original thickness and specific pretreatment and testing fall outside the scope of the disclosed ranges, such that undue experimentation would be required of one of ordinary skill in the art. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. For example, the specification discloses test results for a cellular thermoplastic sheet having an original thickness of 26.2 mm. Presumably, if a sheet having an original thickness significantly less than 26.2 mm was subjected to the same procedure as disclosed in the specification, the total energy absorbed before failure would be significantly less than 0.31 joules. Also, based on the disclosure in Tables I and III of the specification, it appears that even if a cellular thermoplastic sheet having an original thickness of 26.2 mm was used, a total energy absorbed of less than 0.31 joules would result from the impact test unless the sheet was exposed to moisture preconditioning at at least 25% relative humidity at 32°C. until moisture equilibrium was achieved. Furthermore, the disclosure is only enabling for the specific impact test described at pages 6-7 of the specification. Presumably, a cellular thermoplastic sheet having an original thickness of 26.2 mm subjected to the appropriate moisture

preconditioning as disclosed could achieve a significantly higher total energy absorbed at failure if the energy from dropping a weight onto the sheet was applied in smaller increments.

Conversely, a cellular thermoplastic sheet having an original thickness significantly greater than 26.2 mm would presumably achieve a total energy absorbed at failure of at least about 0.31 joules, even without the benefit of the moisture preconditioning described in the specification.

2.Applicant's arguments filed July 2, 2004 have been fully considered but they are not persuasive. Applicant's arguments are considered to be moot by the examiner based on the revised ground of rejection introduced in this Office action.

3.Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allan Kuhns whose telephone number is (571) 272-1202. The examiner can normally be reached on Monday to Thursday from 7:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaanni, can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Allan R. Kuhns

ALLAN R. KUHNS
PRIMARY EXAMINER AU 1732

9-29-04